REMARKS

This paper is presented in response to the Office Action. By this paper, claims 1, 6, 12, and 14 are amended and new claims 17 and 18 are added. Claims 1-18 are now pending in view of the aforementioned new claims.

Reconsideration of the application is respectfully requested in view of the aforementioned amendments and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

I. General Considerations

Applicant notes that the remarks and amendments presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited references. Such remarks, or a lack of remarks, and amendments are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicant reserves the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicant, of additional or alternative distinctions between the claims of the present application and any references cited by the Examiner, and/or the merits of additional or alternative arguments.

II. Objection to Claim 14

The Examiner has objected to claim 14 because of an informality. Applicant submits that in light of the amendment to claim 14 set forth herein, the objection has been overcome and should be withdrawn.

III. Rejection of Claims 1-3 and 5 under 35 U.S.C. § 102

Applicant respectfully notes that a claim is anticipated under 35 U.S.C. § 102(a), (b), or (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. MPEP § 2131.

The Examiner has rejected claims 1-3 and 5 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,337,398 to Benzoni et al. ("Benzoni"). Applicant disagrees with the contentions of the Examiner but submits that for at least the reasons set forth below, the rejection has been overcome and should be withdrawn.

Independent claim 1 has been amended herein to require, among other things, "at least one optical subassembly substantially disposed within the housing and defining a longitudinal axis, the at least one optical subassembly including a plurality of electrical connections; an optoelectronic component mounted within the optical subassembly and in communication with at least one of the electrical connections of the at least one optical subassembly." Claim 1 has further been amended to recite "... and the substrate including a plurality of electrical connections, each of which is configured to interface with a corresponding electrical connection of the at least one optical subassembly ..." Support for these amendments can be found, for example, at least at paragraphs [0006], [0033] and Figures 1A and 1B in the specification. In contrast, the Examiner has not established that *Benzoni* or any other reference teaches, or even suggests, such an arrangement.

Inasmuch as the Examiner has not established that the <u>identical</u> invention is shown in *Benzoni* in as complete detail as is contained in amended claim 1, and because the Examiner has not shown that *Benzoni* discloses the elements of claim 1 <u>arranged as required by that claim</u>, Applicant respectfully submits that the Examiner has not established that *Benzoni* anticipates claim 1. For at least the foregoing reasons, Applicant respectfully submits that the rejection of claim 1, as well as the rejection of corresponding dependent claims 2, 3 and 5, should be withdrawn.

IV. Rejection of Claims 4, 6-16 under 35 U.S.C. § 103

Applicant respectfully notes at the outset that in order to establish a *prima facie* case of obviousness, it is the burden of the Examiner to demonstrate that three criteria are met: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP § 2143*.

The Examiner has rejected claims 4, 6-12, 14, and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Benzoni* in view of a brochure by qLogic entitled "SANblade: 2-Gbps Fiber Channel to PCI Express Host Bus Adapter" ("qLogic"). In general, the Examiner cites qLogic for teaching "a host bus adapter including an optical transceiver." Applicant respectfully traverses the rejections.

Claim 4

Claim 4 depends from claim 1, which, as mentioned previously, has been amended herein. By virtue of its dependence from independent claim 1, dependent claim 4 requires "at least one optical subassembly substantially disposed within the housing and defining a longitudinal axis, the at least one optical subassembly including a plurality of electrical connections; an optoelectronic component mounted within the optical subassembly and in communication with at least one of the electrical connections of the at least one optical subassembly," as well as "... and the substrate including a plurality of electrical connections, each of which is configured to interface with a corresponding electrical connection of the at least one optical subassembly ..." As discussed at III. above however, the Examiner has not established that these limitations, in combination with the other limitations of the rejected claim, are taught or suggested by *Benzoni* or any other reference(s). Applicant thus submits that the Examiner has not established a *prima facie* case of obviousness, at least because even if the *Benzoni* device is modified by in the purportedly obvious fashion advanced by the Examiner, the resulting combination fails to include all the limitations of rejected claim 4. Applicant thus respectfully submits that the rejection of claim 4 should be withdrawn.

Claims 6-12, 14, and 15

Independent claim 6 has been amended herein to recite "a transmit optical subassembly and a receive optical subassembly substantially disposed within the housing, each optical subassembly defining a corresponding longitudinal axis, an optical transmitter being mounted within the transmit optical subassembly and an optical receiver being mounted within the receive optical subassembly ..."

Similarly, claim 12 has been amended to recite "a transmit optical subassembly substantially disposed within the housing and defining a longitudinal axis, an optical transmitter being mounted within the transmit optical subassembly; a receive optical subassembly substantially disposed within the housing and defining a longitudinal axis, an optical receiver being mounted within the receive optical subassembly ..."

In contrast, the Examiner has not established that *Benzoni* or any other reference(s) teach, or even suggest, such an arrangement. For example, *Benzoni* discloses "an optical transmitting device 26 (for example, an LED) and an optical receiving device 28 (for example, a photodiode)" that are attached to substrate 12 directly "through well-known solder bump self-alignment techniques." *Col. 4, lines 45-51*; *Figure 1*, see also *col. 5, lines 6-25*.

Applicant thus submits that the Examiner has not established a *prima facie* case of obviousness, at least because even if *Benzoni* and *qLogic* are combined in the purportedly obvious fashion advanced by the Examiner, the resulting combinations fail to include all the limitations of the rejected claims.

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Applicant thus respectfully submits that the rejection of claims 6 and 12, as well as the rejection of corresponding dependent claims 7-11, 14 and 15 should be withdrawn

Claims 13 and 16

The Examiner has rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over *Benzoni* in view of *qLogic* and further in view of U.S. Patent No. 6,454,470 to Dwarkin et al. ("*Dwarkin*"). The Examiner cites *Dwarkin* for teaching "optical transceivers that are used in connection with 10 Gbps." The Examiner has also rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over *Benzoni* in view of *qLogic* and further in view of U.S. Patent No. 6,318,909 to Giboney et al. ("*Giboney*"). The Examiner cites *Giboney* for teaching "placing circuitry on both sides of the transceiver substrate." Applicant respectfully traverses the rejection

Claims 13 and 16 depend from claim 12, which, as mentioned previously, has been amended herein. By virtue of their dependence from independent claim 12, dependent claims 13 and 16 require "an optical transmitter being mounted to and within the transmit optical subassembly and an optical receiver being mounted to and within the receive optical subassembly." As discussed above however, the Examiner has not established that this limitation, in combination with the other limitations of the rejected claims, is taught or suggested by *Benzoni* or *qLogic*. Thus, the Examiner has not established a *prima facie* case of obviousness because even if the *BenzonilqLogic* combination is combined with *Dwarkin* or *Giboney* in the purportedly obvious fashions advanced by the Examiner, the resulting combinations fail to include all the limitations of the rejected claims. Applicant thus respectfully submits that the rejection of claims 13 and 16 should be withdrawn.

VI. New Claims 17 and 18

By this paper, Applicant has added new dependent claims 17 and 18. Support for these new claims can be found, for example, at least at paragraph [0033] and Figures 1A and 1B in the specification. Inasmuch as claims 17 and 18 depend from claim 12, believed to be in allowable condition for at least the reasons set forth herein, Applicant respectfully submits that claims 17 and 18 are in allowable condition.

CONCLUSION

In view of the remarks submitted herein, Applicant respectfully submits that each of the pending claims 1-18 is now in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of these claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 6th day of March, 2006.

Respectfully submitted,

Peter F. Malen J

Attorney for Applicants

Registration No. 45,576 Customer No. 022913

Telephone: (801) 533-9800

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